EMERGENCY TREATMENT AREA (ETA) BASICS

Introduction:

The ETA represents a complete system designed to receive, triage, and process patients by providing emergency medical treatment and admission into the hospital setting or facilitating their transportation to other medical facilities. The ETA is a complex system relying on team members to orchestrate emergency procedures using specialized equipment to decontaminate patients if necessary, and to provide medical treatment on short notice. Safety of the ETA staff and the hospital environment must be maintained during an incident. Hospital staff coordination in completing this important function is necessary for successfully providing medical care to the injured while protecting both healthcare personnel and the hospital.

The ETA is possibly the most important area for patient care and hospital safety during a large-scale emergency response. By determining priority of patient medical care and by keeping contamination outside the confines of the hospital environment, the ETA is able to protect the hospital and its staff while ensuring quick and efficient treatment of a large number of seriously ill or injured individuals. The ETA is established outside the hospital building; therefore, all necessary equipment must be moved into place when the response begins. Each ETA area requires trained individuals; however, these individuals do not have to be medically trained professionals.

Trigger Points:

The hospital's Emergency Operations Plan (EOP) will contain criteria for establishing the ETA within the basic plan and specific-incident annexes. Some standard incident annexes that include ETA establishment include MCI, HazMat and Chemical, Biological, Radiological, Nuclear or Explosives (CBRNE). Internal events could include significant internal release or introduction of a chemical, biological or radiological substance that warrants decontamination of personnel, patients or visitors. Many times, trigger points for establishment of an ETA will be based on the contents of a facility, town or counties Hazard Vulnerability Assessment (HVA).

The Emergency Treatment Area:

An ETA is designed to process injured, ill, and/or contaminated patients from a HazMat, MCI or CBRNE incident. Typically, an ETA is established as one area with three separate sections. The following sections are building blocks toward accepting patients, assessing their injuries, and processing them into the hospital system.

- The first section is the patient reception and receiving area. It accommodates triage and control procedures. As the patient entry point, it is considered a contaminated zone during HazMat incidents, and staff self-protection is required. Patients are registered and triaged here, and patient tracking is started using triage tags and other patient and property tracking systems. Higher acuity patients are sorted out and moved through the process first.
- The second section is the decontamination corridor. This area accommodates contaminant removal from ambulatory and nonambulatory patients. Typically, decontamination begins with gross decontamination. Patients are given a gross decon kit which provides supplies to assist with clothing removal and containment (which typically removes 60-80% of the contamination); removal, containment and tracking of personal belongings; a covering for patient modesty prior to secondary decon; and supplies to dry and dress following secondary decon. Nonambulatory patients must be grossly deconned by ETA staff. Following gross decon, all patients proceed through secondary decon where they wash (or are washed by ETA staff) for 5-8 minutes with tepid water and soap. Following a thorough rinse, they are surveyed for full contamination removal, dried off, and dressed.
- The third section is the clean treatment and transport area, which provides medical care, secondary triage and transport functions. High acuity patients receive life-saving interventions and rapid transport either into the ED or to another facility for definitive care. The remaining patients receive further assessment and treatment until such time that resources are available to definitively care for them. The transport function in this area can mean anything from walking a few steps into the ED to flight transport to a distant facility and anything in between.

Careful planning considerations for footprint and placement of the ETA:

- **Utilities access**—The ETA requires electrical power and a water supply. Access cords and water lines must be protected, especially from vehicles.
- **Hospital and ED Access**—The ETA requires ready access to the ED entrance. If conditions permit, it is best to have the clean treatment and transport area close to the ED while providing sufficient area for working with patients being triaged, treated and staged or prepared for transport to other hospitals.
- **Heating Ventilation and Air Conditioning (HVAC) intake system**—With the possibility of patient and vapor contamination, responders must ensure the ETA is downwind of the HVAC intake system to avoid contaminating air entering the hospital. Even with prior planning, a shutdown plan is necessary for wind direction changes.
- Ground area elevation and grade—If at all possible, the ETA should be located on level ground or slightly uphill. Water runoff from the ETA must be taken into account when determining site location. Many contaminant vapors are also heavier than air. Positioning the ETA in a low spot may allow vapors to collect, creating a serious problem for patients and staff.
- **ETA equipment space requirements**—The ETA must be large enough to accommodate all three area requirements to allow effective flow through the system.
- Visibility—The ETA must be positioned to ensure the privacy of patients, especially from the media.
- Security support—The selected location must allow for both perimeter and patient control. Lockdown
 procedures should address means of halting all patient access into the hospital through nondesignated entry
 points.
- Weather—Prior to establishing the ETA, weather conditions must be analyzed to determine precipitation probabilities and prevailing wind direction. The ETA should be established with prevailing wind blowing from the decontaminated or cold area toward the contaminated or hot area.

FOR QUESTIONS OR ASSISTANCE PLEASE FEEL FREE TO CONTACT ANY OF US AT ANYTIME.

- * Chris Benton RN Trauma Coordinator Beartooth Hospital & Health Center cbenton@beartoothhospital.org, 406-446-2345
- * Jason Mahoney NREMT-P Trauma Education & Prevention Coordinator St. Vincent Healthcare

 Jason.mahoney@svh-mt.org 406-237-4181
- * Aaron McDowell BS NREMT-P Red Lodge Fire/Rescue aaron@redlodgefire.com 406-446-2320
- * Brad VonBergen RN Trauma Program Coordinator Emergency & Trauma Center Billings Clinic byonbergen@billingsclinic.org 406-435-1581